Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A packet transfer equipment that transfers ~~the~~ a received packet to another node ~~characterized by that~~, comprising:

~~the packet transfer equipment specifies several types of~~ means for extracting information contained in said received packet,

means for inquiring ~~inquires~~ of an external server about ~~one or more type of~~ information related to ~~the~~ a transfer method of said received packet, using the extracted information as a key, ~~and~~

means for resolving ~~resolves~~ the transfer method of said received packet according to the ~~one or more type of~~ information obtained from said external server, and

means for transferring said received packet to said another node, based on the transfer method resolved by said resolving means,

said another node being a node of a user that is to receive and act on said received packet, or a node in a downstream direction towards said node of the user.

2. (Currently Amended) A packet transfer equipment that transfers the received packet to another node ~~characterized by that~~ comprising:

~~the packet transfer equipment specifies one or more type of~~ means for extracting information in said received packet that is determined for each of said received packet,

means for inquiring ~~inquires~~ of an external server about ~~one or more type of~~ information related to ~~the~~ a transfer method of said received packet, using the extracted information as a key, ~~and~~

means for resolving ~~resolves~~ the transfer method of said received packet according to the ~~one or more type of~~ information obtained from said external server, and

means for transferring said received packet to said another node, based on the transfer method resolved by said resolving means,

said another node being a node of a user that is to receive and act on said received packet, or a node in a downstream direction towards said node of the user.

3. (Canceled).

4. (Canceled).

5. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 1 wherein:

the ~~information~~ transfer method resolved by said external server as the information related to the packet transfer method contains ~~at least one~~ each of the information related to rewriting of the information contained in the received packet, the information related to the information added to the received packet, the information related to the information deleted from the received packet, the information related to the control method of the route through which the received packet is transferred and the information related to the resource control method for the route through which the received packet is transferred.

6. (Currently Amended) A packet transfer equipment that transfers ~~the~~ a received packet to another node, comprising:

a packet information extraction section that extracts several types of information contained in said received packet, ~~and~~

a packet transfer method resolution section that specifies said several types of information extracted by said packet information extraction section and inquires of an external server about one or more type of information related to ~~the~~ a transfer method of said received packet, and resolves the transfer method of said received packet according to one or more type of information obtained;

a packet transfer method storage table that temporarily stores the information related to the packet transfer method resolved by said packet transfer method resolution section,

wherein said packet transfer method resolution section checks whether said packet transfer method storage table stores any information related to the transfer method of said received packet before inquiring of an external server about information related to the transfer method of said received packet and, if said packet transfer method storage table stores the information related to the transfer method of said received packet, reads out the information related to the transfer method of said received packet from said packet transfer method storage table and thereby resolves the transfer method of said received packet,

wherein said received packet is transferred to the another node in accordance with the resolved transfer method.

7. – 9. (Canceled).

10. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

the ~~information~~ transfer method resolved by said external server as the information related to the packet transfer method contains ~~at least one~~ each of the information related to rewriting of the information contained in the received packet, the information related to the information added to the received packet, the information related to the information deleted from the received packet, the information related to the control method of the route through which the received packet is transferred and the information related to the resource control method for the route through which the received packet is transferred.

11. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet information extraction section extracts the information encoded over two or more packets.

12. (Canceled).

13. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet transfer method resolution section uses the information contained in said received packet extracted by said packet information extraction section to create ~~the~~ an FQDN and/or ~~the~~ an IP address uniquely indicating the information contained in said received packet.

14. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet transfer method resolution section uniquely recognizes the transfer method of said received packet based on ~~the~~ an FQDN or ~~the~~ an IP address resolved with the domain name system server.

15. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet transfer method resolution section resolves the FQDN or the IP address uniquely indicating the packet transfer method corresponding to the information contained in said received packet extracted by said packet information extraction section by repeating the request for resolution of the FQDN or the IP address one or more times to the domain name system server.

16. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet transfer method resolution section uses the information contained in said received packet extracted by said packet information extraction section to create ~~the~~ an FQDN uniquely indicating the information contained in said received packet, inquires of the domain name system server, using said FQDN as the key, about ~~the~~ an IP address corresponding to said FQDN, inquires of said domain name system server, using the IP address corresponding to said FQDN replied by said domain name system server as ~~the~~ a key, about the FQDN corresponding to said IP address and uniquely recognizes the transfer method of said received packet based on the FQDN corresponding to said IP address ~~replied~~ provided from said domain name system server.

17. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 further comprising:

a service input section to set ~~the~~ a type of the service to be rendered; and

an extracted packet information conversion section to make ~~conversion~~ conversions to the type of information contained in said received packet extracted by said packet information extraction section corresponding to said type of service set to said service input section.

18. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 further comprising:

a resource control request section that, if ~~the~~ resource control for other nodes in the network is required as additional information of the packet transfer method resolved by said packet transfer method resolution section, makes a request for the resource control of said other nodes.

19. – 23. (Canceled).

24. (Currently Amended) A packet transfer method resolution server comprising:

a packet transfer method database where ~~the~~ correspondences between several types of information contained in ~~the~~ a packet and one or more type of information related to ~~the~~ a packet transfer method are registered, and

a packet transfer method resolution request acceptance section that accepts ~~the~~ a packet transfer method resolution request from ~~the~~ a packet transfer equipment that transfers ~~the~~ a received packet to another node inquiring the information related to ~~the~~ a transfer method of said received packet and specifying ~~several types of~~ information contained in said received packet, refers to said packet transfer method database, and ~~replies~~ provides the one or more type of information related to the transfer method of said received packet to said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

25. (Currently Amended) A packet transfer method resolution server comprising:

a packet transfer method database where ~~the~~ correspondences between one or more type of information contained in ~~the~~ a packet and one or more type of information related to ~~the~~ a packet transfer method are registered, and

a packet transfer method resolution request acceptance section that accepts ~~the~~ a packet transfer method resolution request from ~~the~~ a packet transfer equipment that transfers ~~the~~ a received packet to another node inquiring the information related to ~~the~~ a transfer method of said received packet and specifying ~~one or more type of~~ information contained in said received packet that is determined for each of said received packet, refers to said packet

transfer method database and ~~replies~~ provides, to said packet transfer equipment, the one or more type of information related to the transfer method of said received packet,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

26. (Currently Amended) A packet transfer method resolution server comprising:

a packet transfer method database where ~~the~~ correspondences between one or more type of information contained in ~~the~~ a packet and several types of information related to ~~the~~ a packet transfer method are registered, and

a packet transfer method resolution request acceptance section that accepts ~~the~~ a packet transfer method resolution request from ~~the~~ a packet transfer equipment that transfers ~~the~~ a received packet to another node inquiring the information related to ~~the~~ a transfer method of said received packet and specifying ~~one or more type of~~ information contained in said received packet, refers to said packet transfer method database and ~~replies~~ provides, to said packet transfer equipment, several types of information related to the transfer method of said received packet,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

27. (Currently Amended) A packet transfer method resolution server comprising:

a packet transfer method database where ~~the~~ correspondences between one or more type of information contained in ~~the~~ a packet and one or more type of information related to ~~the~~ a packet transfer method are registered, and

a packet transfer method resolution request acceptance section that accepts ~~the~~ a packet transfer method resolution request from ~~the~~ a packet transfer equipment that transfers ~~the~~ a received packet to another node inquiring the information related to ~~the~~ a transfer method of said received packet and specifying one or more type of information contained in said received packet, refers to said packet transfer method database and ~~replies~~ provides, to said packet transfer equipment, one or more type of information related to the transfer method of said received packet that is determined for each of said received packet,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

28. (Currently Amended) [[A]] The packet transfer method resolution server as set forth in claim 24 wherein:

the information ~~replied~~ provided to said packet transfer equipment as the information related to the packet transfer method contains ~~at least one~~ each of:

the information related to rewriting of the information contained in the received packet, the information related to the information added to the received packet, the information related to the information deleted from the received packet, the information related to the control method of the route through which the received packet is transferred and the information related to the resource control method for the route through which the received packet is transferred.

29. (Currently Amended) [[A]] The packet transfer method resolution server as set forth in claim 24 further comprising:

a resource information collection section that collects ~~the~~ resource information in ~~the~~ a network; and

an entry rewriting section that rewrites entries registered to said packet transfer method database based on the resource information in said network collected by said resource information collection section.

30. (Currently Amended) [[A]] The packet transfer method resolution server as set forth in claim 24 further comprising:

a resource control request section that, if ~~the~~ resource control for other nodes in the network is necessary, sends a request for resource control of said other nodes as ~~the~~ additional information of said transfer method when said packet transfer method resolution request acceptance section ~~replies~~ provides the information related to said transfer method in response to said packet transfer method resolution request from said packet transfer equipment.

31. (Currently Amended) [[A]] The packet transfer method resolution server as set forth in claim 24 further comprising:

a packet transfer policy description section that describes ~~the~~ a policy to control the information related to said transfer method replied by said packet transfer method resolution request acceptance section in response to said packet transfer method resolution request from said packet transfer equipment, and

an entry rewriting section that rewrites entries registered to said packet transfer method database based on said policy described in said packet transfer policy description section.

32. (Currently Amended) A DNS server comprising:

an IP address/FQDN correspondence database having ~~the~~ an IP address corresponding to ~~the~~ a FQDN and the FQDN corresponding to the IP address ~~registered~~ stored therein where the FQDN or the IP address in ~~the~~ a packet transfer equipment that transfers ~~the~~ a received packet to another node uniquely indicating several types of information contained in said received packet and the FQDN or the IP address uniquely indicating one or more type of information related to ~~the~~ a transfer method of said received packet are associated, and

a DNS resolution request acceptance section that accepts ~~the~~ an IP address resolution request inquiring the IP address corresponding to the FQDN from ~~the~~ a packet transfer equipment that transfers the received packet to another node, refers to said IP address/FQDN correspondence database and ~~replies~~ provides the IP address corresponding to said FQDN to said packet transfer equipment as well as accepts ~~the~~ a FQDN resolution request inquiring the FQDN corresponding to the IP address from said packet transfer equipment, refers to said IP address/FQDN correspondence database and ~~replies~~ provides the FQDN corresponding to said IP address to said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

33. (Currently Amended) A DNS server comprising:

an IP address/FQDN correspondence database having ~~the~~ an IP address corresponding to ~~the~~ a FQDN and the FQDN corresponding to the IP address ~~registered~~ stored therein where the FQDN or the IP address in ~~the~~ a packet transfer equipment that transfers ~~the~~ a received packet to another node uniquely indicating one or more type of information in said received packet determined for each of said received packet and the FQDN or the IP address uniquely

indicating one or more type of information related to the transfer method of said received packet are associated, and

a DNS resolution request acceptance section that accepts ~~the~~ an IP address resolution request inquiring the IP address corresponding to the FQDN from ~~the~~ a packet transfer equipment that transfers the received packet to another node, refers to said IP address/FQDN correspondence database and ~~replies~~ provides the IP address corresponding to said FQDN to said packet transfer equipment as well as accepts ~~the~~ a FQDN resolution request inquiring the FQDN corresponding to the IP address from said packet transfer equipment, refers to said IP address/FQDN correspondence database and ~~replies~~ provides the FQDN corresponding to said IP address to said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

34. (Currently Amended) A DNS server comprising:

an IP address/FQDN correspondence database having ~~the~~ an IP address corresponding to ~~the~~ a FQDN and the FQDN corresponding to the IP address ~~registered~~ stored therein where the FQDN or the IP address in ~~the~~ a packet transfer equipment that transfers ~~the~~ a received packet to another node uniquely indicating one or more type of information in said received packet and the FQDN or the IP address uniquely indicating several types of information related to the transfer method of said received packet are associated, and

a DNS resolution request acceptance section that accepts ~~the~~ an IP address resolution request inquiring the IP address corresponding to the FQDN from the packet transfer equipment that transfers the received packet to another node, refers to said IP address/FQDN correspondence database and ~~replies~~ provides the IP address corresponding to said FQDN to said packet transfer equipment as well as accepts ~~the~~ a FQDN resolution request inquiring the FQDN corresponding to the IP address from said packet transfer equipment, refers to said IP address/FQDN correspondence database and ~~replies~~ provides the FQDN corresponding to said IP address to said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

35. (Currently Amended) A DNS server comprising:

an IP address/FQDN correspondence database having ~~the~~ an IP address corresponding to ~~the~~ a FQDN and the FQDN corresponding to the IP address ~~registered~~ stored therein where the FQDN or the IP address in ~~the~~ a packet transfer equipment that transfers ~~the~~ a received packet to another node uniquely indicating one or more type of information in said received packet and the FQDN or the IP address uniquely indicating one or more type of information determined for each of said received packet related to ~~the~~ a transfer method of said received packet are associated, and

a DNS resolution request acceptance section that accepts ~~the~~ an IP address resolution request inquiring the IP address corresponding to the FQDN from ~~the~~ a packet transfer equipment that transfers the received packet to another node, refers to said IP address/FQDN correspondence database and ~~replies~~ provides the IP address corresponding to said FQDN to said packet transfer equipment as well as accepts ~~replies~~ provides FQDN resolution request inquiring the FQDN corresponding to the IP address from said packet transfer equipment, refers to said IP address/FQDN correspondence database and ~~replies~~ provides the FQDN corresponding to said IP address to said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

36. (Currently Amended) [[A]] The DNS server as set forth in claim 32 wherein:

the FQDN or the IP address replied by said DNS resolution request acceptance section to said packet transfer equipment uniquely indicates the information related to one or more arbitrary transfer method contained in the processing method of rewriting, addition and deletion for one or more arbitrary piece of information in said received packet and/or the route through which said received packet is transferred and ~~the~~ a resource control method for said route.

37. (Currently Amended) [[A]] The DNS server as set forth in claim 32 further comprising:

a resource information collection section that collects ~~the~~ resource information in the network; and

an entry rewriting section that rewrites entries registered to said IP address/FQDN correspondence database based on the resource information in said network collected by said resource information collection section.

38. (Currently Amended) [[A]] The DNS server as set forth in claim 32 further comprising:

a resource control request section that, if ~~the~~ resource control for other nodes in ~~the~~ a network is judged necessary, sends a request for the resource control to said other nodes when said DNS resolution request acceptance section ~~replies~~ provides the IP address corresponding to said FQDN and the FQDN corresponding to said IP address in response to said IP address resolution request and said FQDN resolution request from said packet transfer equipment.

39. (Currently Amended) [[A]] The DNS server as set forth in claim 32 further comprising:

a packet transfer policy description section that describes ~~the~~ a policy to control the IP address corresponding to said FQDN and the FQDN corresponding to said IP address replied by said DNS resolution request acceptance section in response to ~~said~~ a IP address resolution request and said FQDN resolution request from said packet transfer equipment, and

an entry rewriting section that rewrites entries registered to said IP address/FQDN correspondence database based on said policy described in said packet transfer policy description section.

40. – 53. (Canceled).

54. (New) The packet transfer equipment as set forth in claim 1, wherein the information related to the transfer method include a first type of information corresponding to Destination IP address information, and second type of information corresponding to destination MAC address information.